Dragon Eye (DE) Interim-Small Unit Remote Scouting System (I-SURSS) Small Unmanned Aerial Vehicle (UAV) System Fact Sheet

Developer: Office of Naval Research (ONR) Science & Technology (S & T) Project under development by the Naval Research Laboratory (NRL) in conjunction with the Marine Corps Warfighting Laboratory (MCWL) and Marine Corps Systems Command (MCSC)



System Description: The Dragon Eye is being developed as a small, autonomous navigation, back-packable, expendable but re-usable, bungee or hand launched UAV to provide the Marine Corps with an "over-the-hill or around the corner" tactical reconnaissance and surveillance capability. DE operates between 200 and 1200 feet above ground level and a data transmission range in excess of 5 kilometers. The air vehicle payloads are capable of near-real-time day color and black/white low light imaging. DE's electric motors provide an extremely low noise signature, and the small wingspan makes it very difficult to detect. The air vehicle is battery powered providing 30 to 60 minutes of flight time and has a flight weight of approximately 5 pounds. The air vehicle can be assembled and launched by a two-man team in approximately 10 minutes. Control of the system is by a lightweight computer capable of flight planning, flight monitoring, and storage of frames from transmitted video. The vehicle is capable of in-flight route reprogramming. Initial Operational Capability is anticipated for June 2003.

Air Vehicle Description:

Wingspan: 45 inches

Length: 35.75 inches

Weight w/payload: 5 pounds
Data Transmission Range: 5-10 Km

Endurance: 30 – 60 Minutes

Cruise Speed: 35 kts

Mission Altitude: 200 to 1200 ft AGL

Propulsion: Dual Counter-rotating Electric Motors

Navigation: GPS/Autopilot

Payloads: Interchangeable LLL, EO and IR imagers

Program Summary: DE is being developed for employment by Marine Company size and smaller units to provide a real time tactical reconnaissance capability. Anticipate transition from development to production during FY03. MCSC and PEO(W) are the dual Milestone Decision Authority (MDA) for the I-SURSS's requirement. PMA 263 is the Program Manager.